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X-Ray Scattering from a Linear Charge Distribution

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X-RAY SCATTERING FROM A LINEAR CHARGE DISTRIBUTION

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In n-alcohols and n-paraffins the molecules lie parallel with such a configuration and distribution of scattering centers that one desires to know the character of x-ray scattering from a linear charge wherein there is a break in the continuity. The computation shows that a certain broken line charge will give a distribution of x-ray somewhat similar to that of two charges separated, not by the distance between their centers of charge but approximately 50 per cent more than this distance.

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THE LIQUID STRUCTURE OF N-ALIPHATIC ALCOHOLS

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There is substantial agreement that the molecules of n-aliphatic alcohols lie generally parallel, with the alternate ends of a longitudinal series of molecules being a pair of polar ends and a pair of non-polar ends. The suggestion has been made that there is no transverse space relationship of the polar pairs. The reasons for and against this suggestion are stated and it is concluded that there is high probability that their polar groups in n-alcohols do have a three dimensional space relationship in the liquid state.

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X-RAY EXTINCTION IN PIEZOELECTRICALLY OSCILLATING QUARTZ

J. R. Frederick and G. W. Fox

Fox and Fraser[1] have investigated the extinction of x-rays in piezoelectric quartz crystals by photographic methods for both the oscillating and non-oscillating cases. Apparent increased blackening of the photographic plate was observed for both the dif-

[1] Unpublished work.